

RADIO STATION AUTHORIZATION

Name: AT&T Corp. Call Sign: KA444

Authorization Type: Modification of License File Number: SES-MOD-20181017-03667

Common Carrier Grant date: 08/04/2020 Expiration Date: 06/04/2032

Nature of Service: Fixed Satellite Service

Class of Station: Fixed Earth Stations

A) Site Location(s)

# Site ID	Address	Latitude	Longitude	Elevation (Meters)	Special Provisions NAD (Refer to Section H)
1) 1	311 EARTH STATION ROAD CATAWISSA, COLUMBIA, PA 17820		76°26'21.4"W	295.96	83

Licensee certifies antenna(s) comply with gain patterns specified in Section 25.209

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning June 4, 2017 (3 AM Eastern Standard Time) and ending June 4, 2032 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is 00/00/0000. Grantee must file with the Commission a certification upon completion of construction and commencement of operation.

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands.

The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

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# (MHz)	Polarizati Code	on Emission	Tx/Rx Mode	EIRP /Carrier (dBW)	10	Associated Antenna	(Refer to Section H)	Modulation/ Services
1) 5850.0000-6425.0000	L,R	18M0F8F-	Tx	85.40	61.40	RC2C		TV
2) 5850.0000-6425.0000	L,R	36M0F8F	Tx	87.90	50.60	RC2C		
3) 5850.0000-6425.0000	L,R	1M13F8W-	Tx	71.70	50.10	RC2C		FDM
4) 5850.0000-6425.0000	L,R	36M0F8W	Tx	87.90	50.60	RC2C		
5) 5850.0000-6425.0000	L,R	30M7G7W	Tx	77.00	38.20	RC2C		CABLE
6) 5850.0000-6425.0000	L,R	66M8G7W	Tx	81.20	39.00	RC2C		CABLE
7) 5850.0000-6425.0000	L,R	72M0G7W	Tx	84.80	42.20	RC2C		TDMA
8) 5850.0000-6425.0000	L,R	307KG7W-	Tx	55.70	36.90	RC2C		TDMA
9) 5850.0000-6425.0000	L,R	1M23G7W	Tx	55.70	30.80	RC2C		TDMA

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For the text of these provisions, refer to Section H.

#	Frequency (MHz)	Polarizatio		Tx/Rx Mode	Max EIRP /Carrier (dBW)		Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services	
10) 585	50.0000-6425.0000	L,R	38K4G7W	Tx	66.50	56.70	RC2C		SCPC	
11) 585	50.0000-6425.0000	L,R	54K6G7W-	Tx	67.50	56.10	RC2C		IDR	
12) 585	50.0000-6425.0000	L,R	6M84G7W	Tx	85.90	53.60	RC2C		IDR	
13) 585	50.0000-6425.0000	L,R	81K9G7W-	Tx	68.00	54.90	RC2C		IBS	
14) 585	50.0000-6425.0000	L,R	54K6G7W-	Tx	69.60	58.20	RC2C		IBS	
15) 585	50.0000-6425.0000	L,R	7M44G7W	Tx	90.10	57.40	RC2C		IBS	
16) 362	25.0000-4200.0000	L,R		Rx			RC2C			
17) 585	50.0000-6425.0000	H, V, L,	R 72M0G7W	Tx	84.28	41.73	13.1		DIGITAL DATA	
18) 585	50.0000-6425.0000	H, V, L,	R 54K6G7W	Tx	65.95	54.60	13.1		DIGITAL DATA	
19) 362	25.0000-4200.0000	H, V, L,	R 72M0G7W	Rx			13.1		DIGITAL DATA	
20) 362	25.0000-4200.0000	H, V, L,	R 54K6G7W	Rx			13.1		DIGITAL DATA	
21) 585	50.0000-6425.0000	H, V, L,	R 72M0G7W	Tx	82.58	40.03	11.1M		DIGITAL DATA	
22) 585	50.0000-6425.0000	H, V, L,	R 54K6G7W	Tx	64.25	52.90	11.1M		DIGITAL DATA	
23) 362	25.0000-4200.0000	H, V, L,	R 72M0G7W	Rx			11.1M		DIGITAL DATA	
24) 585	50.0000-6425.0000	H, V, L,	R 54K6G7W	Rx			11.1M		DIGITAL DATA	
25) 585	50.0000-6425.0000	L,R	11M2G7W	Tx	88.60	54.10	RC2C		IBS	

C) Frequency Coordination Limits

#	Frequency Limits (MHz)	Satellite Arc (Deg. Long.) East West Limit Limit	Elevation (Degrees) East West Limit Limit	Azimuth (Degrees) East West Limit Limit	Max EIRP Density toward Horizon (dBW/4kHz)	Associated Antenna(s)
1)	5850.0000-6425.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	20	RC2C
2)	3625.0000-4200.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	0	RC2C
3)	5850.0000-6425.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	12.53	13.1
4)	3625.0000-4200.0000	4.6W-148.2W	05.0-05.0	102.0-258.0		13.1

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		Satellite Arc (Deg. Long.)	Elevation (Degrees)	Azimuth (Degrees)	Max EIRP Density toward	
#	Frequency Limits (MHz)	East West Limit Limit	East West Limit Limit	East West Limit Limit	Horizon (dBW/4kHz)	Associated Antenna(s)
5)	5850.0000-6425.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	12.53	11.1M
6)	3625.0000-4200.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	0	11.1M

D) Points of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

E) Antenna Facilities

	Site ID	Antenna ID	Units	Diameter (meters)	Manufacturer	Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
1		11.1M	2	11.1	GEN DYNAMICS	SATCOM	295.96	11.1 AGL/ 307.1 AMSL	
	Maxi	*	power		3.9500 GHz 55. na flange (Watts) = all carriers (dBW) =	6 dBi @ 6.179 500.00 82.58	50 GHz		
1		13.1	2	13.1	GEN DYNAMICS	SATCOM	295.96	13.1 AGL/ 309.1 AMSL	
	Maxi	-	power	at antenn	3.9500 GHz 57. na flange (Watts) = all carriers (dBW) =	3 dBi @ 6.175 500.00 84.28	50 GHz		
1		RC2C	1	32	NEC	STANDARD A	295.96	39.18 AGL/ 335.21 AMSL	
	Maxi	=	power	at antenn	4.0000 GHz 63. na flange (Watts) = all carriers (dBW) =	9 dBi @ 6.000 14,230.00 105.43	00 GHz		

F) Remote Control Point:

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^{1) 1} to Permitted Space Station List



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G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

H) Special and General Provisions

- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
 - 4 --- Licensee must ensure that a current listing of the name, title, mailing address, email address, and telephone number of the responsible point of contact are on file at the FCC. Any changes must be filed electronically in the International Bureau Filing System (MyIBFS) using the "Pleadings and Comments" link on the MyIBFS homepage within 10 days of the change.
 - 6 --- Licensee must comply with the license modification and notification requirements of 47 CFR § 25.118 to change the coordinates of its authorized earth station.
 - 8 --- Licensee must notify the Commission when all earth stations operating under this authorization are no longer operational or when they have not been used to provide any service during any 6-month operation.
 - 5225 --- This action constitutes the final step with respect to the provision of the services only insofar as the US regulatory process is concerned. However, this authority shall not be construed as authorizing the distribution of programming where the approriate copyright clearances have not been obtained or where the U.S. Government has determined that appropriate copyright protection does not otherwise exist.
 - 5738 --- This authorization is subject to the conditions and terms set forth in the Commission's Order and Authorization, FCC 99-210, released August 6, 1999, and Memorandum Opinion and Order, FCC 01-107, released March 29, 2001, and New Skies Satellites N.V., Petition for Declaratory Ruling, Order, DA 01-513 (Int'l Bureau, Satellite and Radiocommunication Division, released Mar. 29, 2001)
 - 5880 --- Use of this facility to provide international service on a common carrier basis requires a separate authorization under Section 214 of the Communication Act of 1934, as amended.
- 90398 --- Changes to previously authorized transmitting facilities, operations and devices regulated by the Commission that may have significant environmental impact, and are not excluded by §1.1306, require the preparation of an Environmental Assessment (EA) by the licensee. (See 47 C.F.R. §§1.1307, 1.1308 and 1.1311)
- 90399 --- The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized earth station(s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 90405 --- Operations with PERMITTED LIST satellite must comply with §25.212 levels and operations above these levels must coordinate with satellite operators prior to operations.

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H) Special and General Provisions

A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:

- 90470 --- The application for this authorization was filed within the 194-day filing window for FSS earth stations operating in the 3700-4200 MHz frequency band as of April 19, 2018, as established by Public Notice DA 18-398 (rel. Apr. 19, 2018) and Public Notice DA-18-639 (rel. Jun. 21, 2018), and Public Notice DA 18-1061 (rel. Oct. 17, 2018).
- 90471 --- The application for this authorization was filed with a coordination report therefore operations of this earth station in the 3700-4200 MHz band are protected within the limits establish by the coordination report filed.
- 900407 --- The Permitted Space Station List (Permitted List) is a list of all geostationary space stations providing fixed-satellite service pursuant to a Commission license or grant of U.S. market access. The Permitted List currently includes the following frequency bands per \$25.103 and \$25.115(k)(1):

3600-4200 MHz (space-to-Earth) 5850-6725 MHz (Earth-to-space) 10.95-11.2 GHz (space-to-Earth) 11.45-12.2 GHz (space-to-Earth) 13.75-14.5 GHz (Earth-to-space) 18.3-18.8 GHz (space-to-Earth) 19.7-20.2 GHz (space-to-Earth) 24.75-25.25 GHz (Earth-to-space) 28.35-28.6 GHz (Earth-to-space)

29.25-30.0 GHz (Earth-to-space).

Earth stations with "Permitted List" designated as a point of communication may access any space station on the Permitted List, provided the operations comply with the applicable "routine" uplink and downlink limits, are within the specific frequency bands authorized in the earth station license, have completed coordination with terrestrial stations pursuant to §25.203, and otherwise comply with all terms and conditions of both the earth station license and the space station grant.

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B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R.§ 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station is not ready for operation by the required date of completion of construction unless an application for modification of authorization to request additional time to complete construction is filed by that date, together with a showing that failure to complete construction by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulates is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993." These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.

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